

FIG. 1

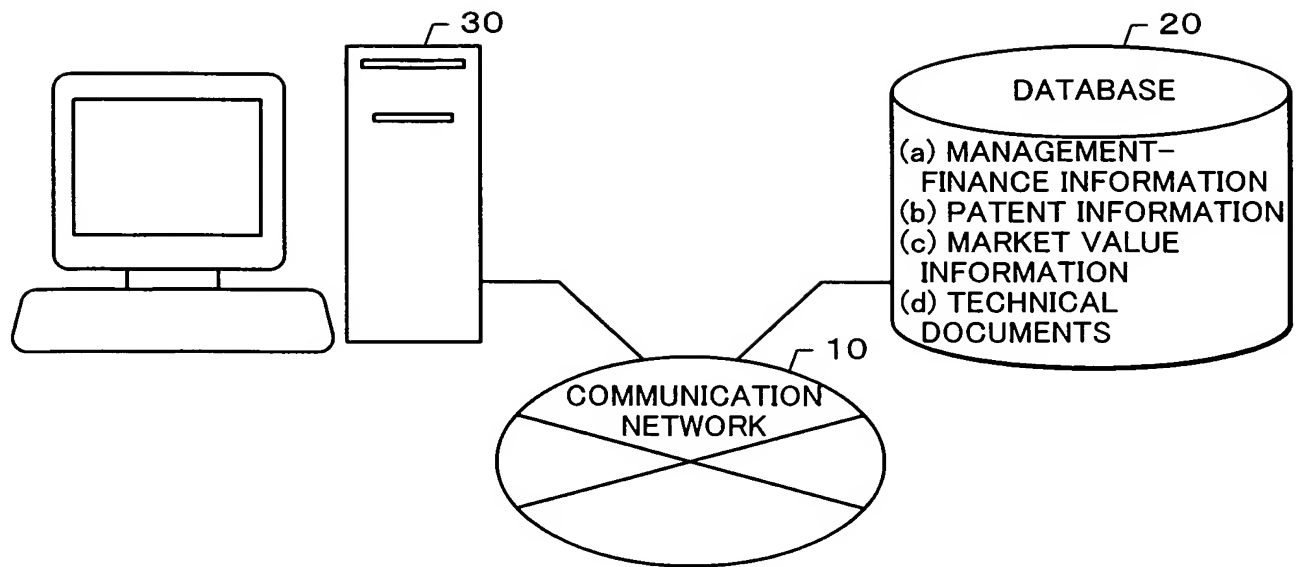


FIG. 2

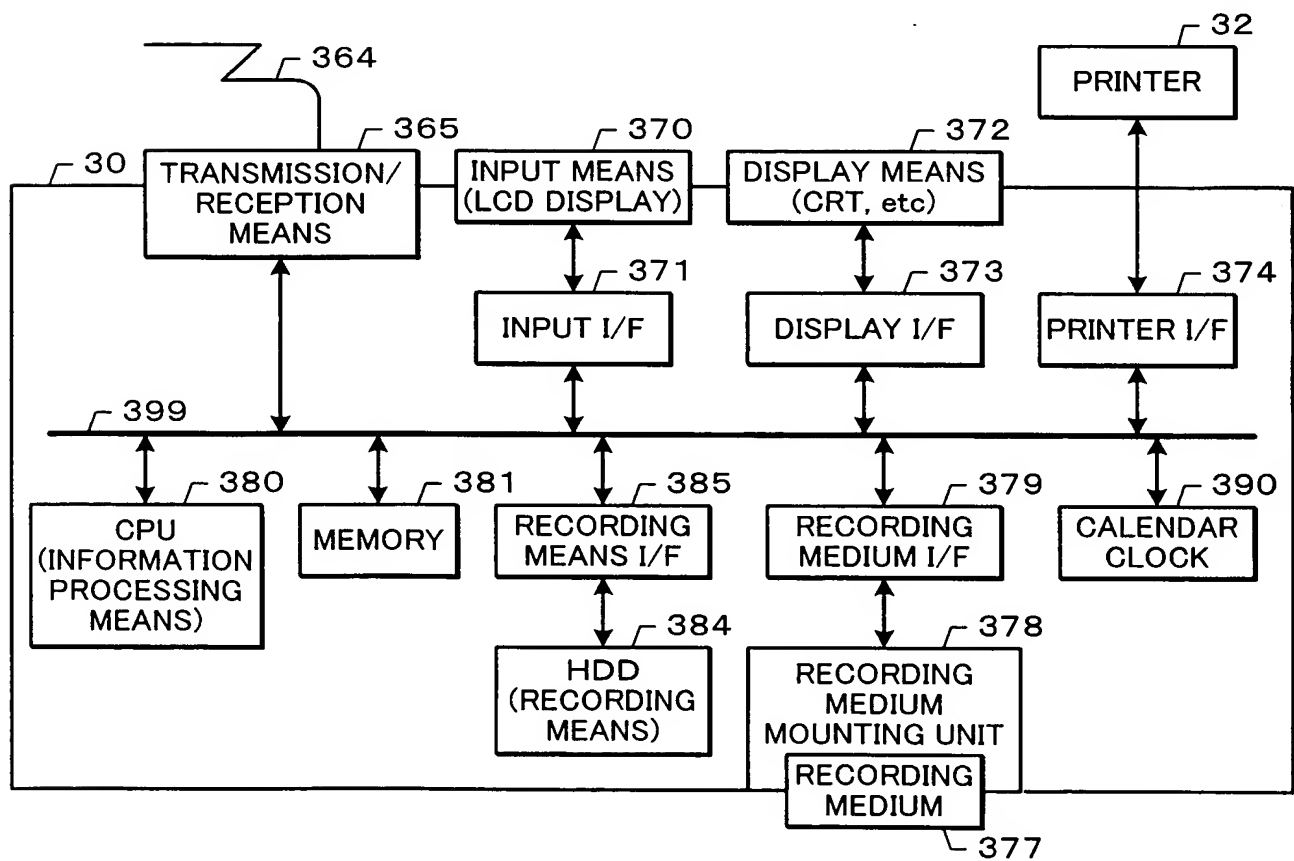


FIG. 3

(a) MANAGEMENT-FINANCE INFORMATION

(A) Information on Size of Company	(B) Financial Information of Company		(C) Combined Information of Company
Number of employees	Sales volume	Total assets	Sales volume per employee
Number of officers	Sales profit	Tangible fixed assets	R&D cost per employee
Capital	Operating profit	Amount of capital investment	Sales profit per employee
Number of plants/offices	Gross operating profit	Depreciation costs	Operating profit per employee
Ground floor area	Sales profit ratio	Patent royalty income	Gross operating profit per employee
Total floor area	Operating profit ratio	Financial assets (liquid assets and liquid liabilities)	
Ownership ratio of premises	Gross operating profit ratio	Interests paid/discounts	
Ownership ratio of building	Total market value to total assets ratio	Long-term prime rate (long-term borrowing rate)	
Number of employees (consolidated basis)	Total market value to stockholders' equity ratio	Short-term prime rate	
Number of officers (consolidated basis)	Total market value to sales volume ratio	Interest on bonds	
Capital (consolidated basis)	Total market value to gross operating profit ratio	10-year government bond yield ratio	
Number of plants/offices (consolidated basis)	Total market value to operating profit ratio	Personnel costs, (including officers compensation and labor costs)	
Ground floor area (consolidated basis)	Gross operating profit to total assets ratio	Welfare expenses	
Total floor area (consolidated basis)	Gross operating profit to stockholders' equity ratio	Capital stock	
Ownership ratio of premises (consolidated basis)	Operating profit to total assets ratio	Total number of outstanding shares	
Ownership ratio of building (consolidated basis)	Operating profit to Stockholders' equity ratio	Stock price (Nikkei Stock Average)	
	Stockholders' equity ratio	Taxes and public charges	
	Balance of total market value and stockholders' equity		
	R&D cost		
	R&D cost to sales volume ratio		
	R&D cost to operating profit ratio		
	R&D cost to gross operating profit ratio		

FIG. 4A

(b) PATENT INFORMATION

(A) Application Related Matters	
Filing date	Number of filings
Application number	Number of request for examination
Title of the invention	Number of filings based on IPC
Inventors	Number of filings based on keywords
Applicants	Number of claims filed
Scope of claims	Years spent on examination requests
Abstract	Number of inventors
IPC	Number of applicants (number of joint applications)
FI	Number of domestic priority-claiming applications
F term	Number of domestic priority bases claimed in applications
Agents	Number of priority bases from foreign countries
Publication date	Number of applications in which an exception to loss of novelty is requested
Publication number	Number of applications in which examination is requested before laid-open
Existence of request for examination	Number of divisional applications
Date of request for examination	Number of withdrawn/abandoned applications
Priority date	Number of converted applications
Priority number	Number of expedited examinations
Date of publication of translations of PCT international application	Number of filings (in each country)
Number for publication of translations of PCT international application	Number of inventors in applications (in each country)
Date of domestic re-publication of PCT international application	Number of applicants in applications (in each country)
Number for domestic re-publication of PCT international application	Number of priority-claiming applications (in each country)
International filing date	Number of priority bases claimed in applications (in each country)
International application number	Number of divisional applications (in each country)
International publication date	
International publication number	
Designated countries	

FIG. 4B

(b) PATENT INFORMATION

(B) Registration Related Matters	
Registration date	Number of registrations
Issue date of registration	Number of claims registered
Registration number	Number of expired patents after registration
Scheduled day of expiration of right	Years spent from application to registration
Date of publication of examined application	Patent registration rate
Publication number of examined application	Patent allowance rate
Annual maintenance fee payment status	Years spent from request for examination to registration
Number of final decisions for rejection	Number of applications in which preferential examination is conducted
Date of final decision for rejection	Number of rejections issued
Number of claims decided to be finally rejected	Number of amendments filed
Number of appeals against final decision for rejection	Number of amendments filed (for formalities)
number of abandoned/withdrawn applications after request for examination	Number of written oppositions filed
Number of abandoned/withdrawn claims after request for examination	Number of appeals and trials
Number of invalidation trials	Number of registrations for creating patent right
Appeal/trial number	Number of registrations for extending term of patent right
Date of decision to appeal/trial	Number of transferred patents
Number of claims demanded for invalidation trial	Number of registrations (in each country)
Number of appeals to dismissal of amendment or trials for correction	Years required for registration (in each country)
Number of oppositions	Years spent on examination (in each country)
Number of claims demanded for opposition	Number of rejections issued (in each country)
Inventors of registered patent	Number of amendments filed (in each country)
Number of inventors of registered patent	Number of amendments filed (for formalities) (in each country)
Applicants of registered patent	Number of oppositions filed (in each country)
References cited	Number of applications in which preferential examination is conducted
	Number of rejections issued

FIG. 5

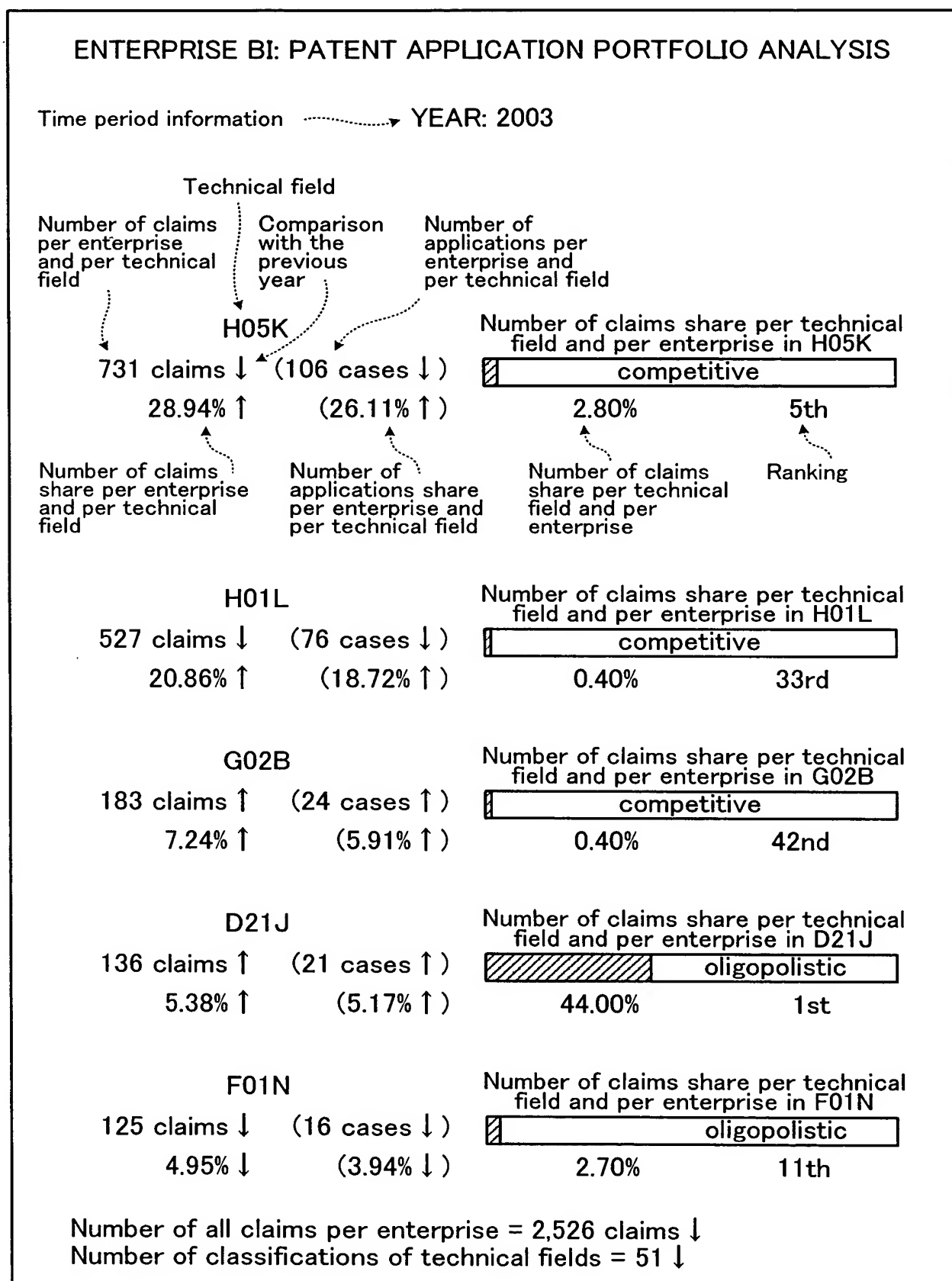


FIG. 6

CALCULATION EXAMPLE OF PATENT DIVERSIFICATION INDEX (PDI) (ENTERPRISE A)

CALCULATION 1

ALL TECHNICAL FIELDS IN WHICH ENTERPRISE A FILED PATENT APPLICATIONS (IN 1999)	ITEMS	NUMBER OF CLAIMS PER ENTERPRISE AND PER TECHNICAL FIELD $k(i)$	PER ENTERPRISE AND PER TECHNICAL FIELD SHARE $s(i) = k(i)/K$ (Formula 7)	SEI INDEX PER ENTERPRISE AND PER TECHNICAL FIELD $F.SEI(i) = s(i)^2$ (Formula 8)
H01L		10	0.033	0.001
G06F		26	0.087	0.008
G11B		40	0.133	0.018
H04N		60	0.200	0.040
H01J		164	0.547	0.299
(No other fields)				
TOTAL		$K = \sum k(i)$	$S = \sum s(i)$	$F.SEI = \sum SEI(i)$ (Formula 9)
		300	1.000	0.365
PATENT DIVERSIFICATION RATIO ($1 - F.SEI$)				0.635
PATENT DIVERSIFICATION INDEX (Formula 10) $PDI = (1 - F.SEI) \times 100$				63.5

$$\begin{aligned}
 PDI &= (1 - F.SEI) \times 100 \\
 &= (1 - \sum F.SEI(i)) \times 100 \\
 &= [1 - \sum s(i)^2] \times 100 \\
 &= [1 - \sum (k(i)/K)^2] \times 100 \\
 &= [1 - 0.365] \times 100 \\
 &= 63.5
 \end{aligned}$$

$k(i)$: NUMBER OF CLAIMS PER TECHNICAL FIELD

K : TOTAL NUMBER OF CLAIMS OF ALL TECHNICAL FIELDS

$s(i) = k(i)/K$: SHARE PER TECHNICAL FIELD

$SEI(i) = s(i)^2$: SEI INDEX PER TECHNICAL FIELD

$F.SEI$: TOTAL OF SEI INDEXES OF ALL TECHNICAL FIELDS

PDI : PATENT DIVERSIFICATION INDEX

FIG. 7

CALCULATION EXAMPLE OF PATENT DIVERSIFICATION INDEX (PDI) (ENTERPRISE B)

CALCULATION 2

ALL TECHNICAL FIELDS IN WHICH ENTERPRISE A FILED PATENT APPLICATIONS (IN 1999)	ITEMS	NUMBER OF CLAIMS PER ENTERPRISE AND PER TECHNICAL FIELD $k(i)$	PER ENTERPRISE AND PER TECHNICAL FIELD SHARE $s(i) = k(i)/K$ (Formula 7)	SEI INDEX PER ENTERPRISE AND PER TECHNICAL FIELD $F.SEI(i) = s(i)^2$ (Formula 8)
	H01L	70	0.070	0.005
	G06F	70	0.070	0.005
	G11B	70	0.070	0.005
	H04N	70	0.070	0.005
	H01J	70	0.070	0.005
	H01B	70	0.070	0.005
	G06D	70	0.070	0.005
	G11H	70	0.070	0.005
	H04B	70	0.070	0.005
	H01B	70	0.070	0.005
	G06B	70	0.070	0.005
	G11P	70	0.070	0.005
	H04G	80	0.080	0.006
	H01C	80	0.080	0.006
	(No other fields)			
TOTAL		$K = \sum k(i)$	$S = \sum s(i)$	$F.SEI = \sum SEI(i)$ (Formula 9)
		1,000	1.000	0.072
PATENT DIVERSIFICATION RATIO (1 - F.SEI)				0.928
PATENT DIVERSIFICATION INDEX (Formula 10) $PDI = (1 - F.SEI) \times 100$				92.8

$$\begin{aligned}
 PDI &= (1 - F.SEI) \times 100 \\
 &= (1 - \sum F.SEI(i)) \times 100 \\
 &= \{1 - \sum s(i)^2\} \times 100 \\
 &= \{1 - \sum (k(i)/K)^2\} \times 100 \\
 &= \{1 - 0.072\} \times 100 \\
 &= 92.8
 \end{aligned}$$

$k(i)$: NUMBER OF CLAIMS PER TECHNICAL FIELD

K : TOTAL NUMBER OF CLAIMS OF ALL TECHNICAL FIELDS

$s(i) = k(i)/K$: SHARE PER TECHNICAL FIELD

$SEI(i) = s(i)^2$: SEI INDEX PER TECHNICAL FIELD

F.SEI : TOTAL OF SEI INDEXES OF ALL TECHNICAL FIELDS

PDI : PATENT DIVERSIFICATION INDEX

FIG. 8

CATEGORIES OF EVALUATION TYPE IN PATENT DIVERSIFICATION INDEX (PDI)

CATEGORIES OF EVALUATION TYPE	PATENT DIVERSIFICATION INDEX (PDI) VALUE
SUPER GENERALIZED TYPE	96 OR MORE
GENERALIZED TYPE	90 OR MORE, LESS THAN 96
BALANCED TYPE	76 OR MORE, LESS THAN 90
CONCENTRATED TYPE	50 OR MORE, LESS THAN 76
SUPER CONCENTRATED TYPE	LESS THAN 50

FIG. 9

CALCULATION EXAMPLE OF PATENT DIVERSIFICATION INDEX (PDI) (ENTERPRISE A)

EXAMPLES NOT LIMITED TO 2 POWER OF SHARE PER TECHNICAL FIELD IN SEI INDEX PER ENTERPRISE AND PER TECHNICAL FIELD (ENTERPRISE A)

ALL TECHNICAL FIELDS IN WHICH ENTERPRISE A FILED PATENT APPLICATIONS (IN 1999)	ITEMS	NUMBER OF CLAIMS PER ENTERPRISE AND PER TECHNICAL FIELD $k(i)$	PER ENTERPRISE AND PER TECHNICAL FIELD SHARE $s(i) = k(i)/K$ (Formula 7)	SEI INDEX PER ENTERPRISE AND PER TECHNICAL FIELD (SHARE POWERED BY k_b)			
				2 POWER OF SHARE $F.SEI(i) = s(i)^2$	3 POWER OF SHARE $F.SEI(i) = s(i)^3$	1.5 POWER OF SHARE $F.SEI(i) = s(i)^{1.5}$	0.5 POWER OF SHARE $F.SEI(i) = s(i)^{0.5}$
H01L		10	0.033	0.001111	0.000037	0.006086	0.182574
G06F		26	0.087	0.007511	0.000651	0.025514	0.294392
G11B		40	0.133	0.017778	0.002370	0.048686	0.365148
H04N		60	0.200	0.040000	0.008000	0.089443	0.447214
H01J		164	0.547	0.298844	0.163368	0.404188	0.739369
TOTAL		$K = \sum k(i)$	$S = \sum s(i)$	$F.SEI = \sum SEI(i) = \sum (s(i)^{\alpha})$			
		300	1.000	0.365	0.174	0.574	2.029
PATENT DIVERSIFICATION RATIO $(1 - F.SEI)$				0.635	0.826	0.426	-1.029
PATENT DIVERSIFICATION INDEX $PDI = (1 - F.SEI) \times 100$				63.5	82.6	42.6	-102.9

FIG. 10

EXAMPLES NOT LIMITED TO 2 POWER OF SHARE PER TECHNICAL FIELD IN
SEI INDEX PER ENTERPRISE AND PER TECHNICAL FIELD (ENTERPRISE B)

ALL TECHNICAL FIELDS IN WHICH ENTERPRISE B FILED PATENT APPLICATIONS (IN 1999)	ITEMS	NUMBER OF CLAIMS PER ENTERPRISE AND PER TECHNICAL FIELD $k(i)$	PER ENTERPRISE AND PER TECHNICAL FIELD SHARE $s(i) = k(i)/K$ (Formula 7)	SEI INDEX PER ENTERPRISE AND PER TECHNICAL FIELD (SHARE POWERED BY k_b)			
				2 POWER OF SHARE $F.SEI(i)$ $= s(i)^2$	3 POWER OF SHARE $F.SEI(i)$ $= s(i)^3$	1.5 POWER OF SHARE $F.SEI(i)$ $= s(i)^{1.5}$	0.5 POWER OF SHARE $F.SEI(i)$ $= s(i)^{0.5}$
H01L		70	0.070	0.004900	0.000343	0.018520	0.264575
G06F		70	0.070	0.004900	0.000343	0.018520	0.264575
G11B		70	0.070	0.004900	0.000343	0.018520	0.264575
H04N		70	0.070	0.004900	0.000343	0.018520	0.264575
H01J		70	0.070	0.004900	0.000343	0.018520	0.264575
H01B		70	0.070	0.004900	0.000343	0.018520	0.264575
G06D		70	0.070	0.004900	0.000343	0.018520	0.264575
G11H		70	0.070	0.004900	0.000343	0.018520	0.264575
H04B		70	0.070	0.004900	0.000343	0.018520	0.264575
H01B		70	0.070	0.004900	0.000343	0.018520	0.264575
G06B		70	0.070	0.004900	0.000343	0.018520	0.264575
G11P		70	0.070	0.004900	0.000343	0.018520	0.264575
H04G		80	0.080	0.006400	0.000512	0.022627	0.282843
H01C		80	0.080	0.006400	0.000512	0.022627	0.282843
TOTAL		$K = \sum k(i)$	$S = \sum s(i)$	$F.SEI = \sum SEI(i) = \sum (s(i)^\alpha)$			
		300	1.000	0.072	0.005	0.267	3.741
PATENT DIVERSIFICATION RATIO (1 - F.SEI)				0.928	0.995	0.733	-2.741
PATENT DIVERSIFICATION INDEX $PDI = (1 - F.SEI) \times 100$				92.8	99.5	73.3	-274.1

FIG. 11

CALCULATION EXAMPLE OF PATENT COMPETITIVE POSITION INDEX (PCPI)

CALCULATION 3

NUMBER OF CLAIMS FILED BY EACH ENTERPRISE IN TECHNICAL FIELD 1 (H01L)

ALL ENTERPRISES THAT FILED PATENT APPLICATIONS IN TECHNICAL FIELD 1 (IN 1999)	ITEMS	NUMBER OF CLAIMS PER TECHNICAL FIELD AND PER ENTERPRISE $k(j)$	PER TECHNICAL FIELD AND PER ENTERPRISE SHARE $s(j) = k(j)/K$ (Formula 11)	SEI INDEX PER TECHNICAL FIELD AND PER ENTERPRISE $C.SEI(j) = s(j)^2$ (Formula 12)	SEI SCORE PER TECHNICAL FIELD AND PER ENTERPRISE $SSEI(j) = s(j) \times C.SEI \times 100$ (Formula 14)
A		10	0.020	0.0004	1.31
B		70	0.140	0.0196	9.16
C		4	0.008	0.0001	0.52
D		3	0.006	0.0000	0.39
E		15	0.030	0.0009	1.96
OTHERS		398	0.796	0.6336	52.11
TOTAL		$K = \sum k(j)$	$S = \sum s(j)$	$C.SEI = \sum C.SEI(j)$	
		500	1.000	0.6546	

SEI SCORE PER ENTERPRISE IN H01L OF ENTERPRISE A = 1.31
 B = 9.16
 C = ...

$$\begin{aligned}
 SSEI(j) &= s(j) \times C.SEI \times 100 \\
 &= s(j) \times \{ \sum C.SEI(j) \} \times 100 \\
 &= s(j) \times \{ \sum s(j)^2 \} \times 100 \\
 &= (k(j)/K) \times \{ \sum (k(j)/K)^2 \} \times 100
 \end{aligned}$$

$k(j)$: NUMBER OF CLAIMS PER ENTERPRISE

K : TOTAL NUMBER OF CLAIMS OF ALL ENTERPRISES

$s(j) = k(j)/K$: SHARE PER ENTERPRISE

$C.SEI(j) = s(j)^2$: SEI INDEX PER ENTERPRISE

$C.SEI$: TOTAL OF SEI INDEXES OF ALL ENTERPRISES

$SSEI$: SEI SCORE PER ENTERPRISE

FIG. 12

CALCULATION 4
NUMBER OF CLAIMS FILED BY EACH ENTERPRISE IN TECHNICAL FIELD 2 (G06F)

ALL ENTERPRISES THAT FILED PATENT APPLICATIONS IN TECHNICAL FIELD 2 (IN 1999)	ITEMS	NUMBER OF CLAIMS PER TECHNICAL FIELD AND PER ENTERPRISE $k(j)$	PER TECHNICAL FIELD AND PER ENTERPRISE SHARE $s(j) = k(j)/K$ (Formula 11)	SEI INDEX PER TECHNICAL FIELD AND PER ENTERPRISE $C.SEI(j) = s(j)^2$ (Formula 12)	SEI SCORE PER TECHNICAL FIELD AND PER ENTERPRISE $SSEI(j) = s(j) \times C.SEI \times 100$ (Formula 14)
A		26	0.027	0.0007	1.75
B		70	0.072	0.0052	4.72
C		8	0.008	0.0001	0.54
D		5	0.005	0.0000	0.34
E		33	0.034	0.0012	2.23
OTHERS		828	0.854	0.7286	55.88
TOTAL		$K = \sum k(j)$	$S = \sum s(j)$	$C.SEI = \sum C.SEI(j)$	
		970	1.000	0.7358	

SEI SCORE PER ENTERPRISE IN G06F OF ENTERPRISE A = 1.75
 B = 4.72
 C = ...

$$\begin{aligned}
 SSEI(j) &= s(j) \times C.SEI \times 100 \\
 &= s(j) \times \{ \sum C.SEI(j) \} \times 100 \\
 &= s(j) \times \{ \sum s(j)^2 \} \times 100 \\
 &= (k(j)/K) \times \{ \sum (k(j)/K)^2 \} \times 100
 \end{aligned}$$

$k(j)$: NUMBER OF CLAIMS PER ENTERPRISE
 K : TOTAL NUMBER OF CLAIMS OF ALL ENTERPRISES
 $s(j) = k(j)/K$: SHARE PER ENTERPRISE
 $C.SEI(j) = s(j)^2$: SEI INDEX PER ENTERPRISE
 C.SEI : TOTAL OF SEI INDEXES OF ALL ENTERPRISES
 SSEI : SEI SCORE PER ENTERPRISE

FIG. 13

CALCULATION EXAMPLE 1 OF PATENT COMPETITIVE POSITION INDEX D (PCPID)
(PROCEDURE 2)

CALCULATION 5

SEI SCORE PER TECHNICAL FIELD AND PER ENTERPRISE (S.SEI) AND
TOTAL OF SEI SCORES PER TECHNICAL FIELD AND PER ENTERPRISE
OF ALL TECHNICAL FIELDS

ENTERPRISES TECHNICAL FIELDS	ENTERPRISES				
	ENTERPRISE A	ENTERPRISE B	ENTERPRISE C	ENTERPRISE D	...
H01L	1.31	9.16	0.52	0.39	1.96
G06F	1.75	4.72	0.54	0.34	2.23
G11B	3.57	1.11	...	...	...
H04N	4.12	0.13	...	...	...
H01J	150.10	1.05	...	...	...
OTHERS	—	0.04	...	...	...
TOTAL (T.SEI) PCPID (Formula 15)	T.SEI(A)	T.SEI(B)	T.SEI(C)	T.SEI(D)	
	160.85	16.22	...	...	...

PCPI(X) : PATENT COMPETITIVE POSITION INDEX

T.SEI(X) : TOTAL OF SEI SCORES OF ALL TECHNICAL FIELDS

S.SEI(X) : SEI SCORE OF EACH ENTERPRISE AND EACH TECHNICAL FIELD

$$PCPI(X) = T.SEI(X)$$

$$T.SEI(X) = \sum \{S.SEI(X)\}$$

FIG. 14

EXAMPLES OF EXCESS GROWTH RATE
FOR CALCULATION OF PATENT COMPETITIVE POSITION INDEX (PCPI)

CALCULATION 6
EXCESS GROWTH RATE OF NUMBER OF CLAIMS

ITEMS \ ENTERPRISES	ENTERPRISE A	ENTERPRISE B	ENTERPRISE C	...
GROWTH RATE $\kappa(X)$ OF NUMBER OF CLAIMS OF EACH ENTERPRISE	5.0%	-1.0%	...	...
AVERAGE GROWTH RATE $\kappa(\text{all})$ OF NUMBER OF CLAIMS OF ALL ENTERPRISES	2.3%	2.3%	...	...
EXCESS GROWTH RATE $\Delta\kappa(X)$ (Formula 16)	$\kappa(A) - \kappa(\text{all})$	$\kappa(B) - \kappa(\text{all})$		
	2.7%	-3.3%	...	...

$$\Delta\kappa(X) = \kappa(X) - \kappa(\text{all})$$

$\Delta\kappa(X)$: EXCESS GROWTH RATE OF THE ENTERPRISE (X)

$\kappa(X)$: GROWTH RATE OF NUMBER OF CLAIMS OF THE ENTERPRISE (X)

$\kappa(\text{all})$: AVERAGE GROWTH RATE OF NUMBER OF CLAIMS OF ALL ENTERPRISES

FIG. 15

CORRECTION EXAMPLES OF PATENT COMPETITIVE POSITION INDEX (PCPI)
BY EXCESS GROWTH RATE

CALCULATION 7
CORRECTION OF NUMBER OF CLAIMS BY EXCESS GROWTH RATE

ITEMS \ ENTERPRISES	ENTERPRISE A	ENTERPRISE B	ENTERPRISE C	...
PATENT COMPETITIVE POSITION INDEX T.SEI(X) (Formula 15) BEFORE CORRECTION	160.85	16.22	...	...
EXCESS GROWTH RATE $\Delta\kappa(X)$ (Formula 16)	2.7%	-3.3%	...	...
PATENT COMPETITIVE POSITION INDEX PCPI(X) (Formula 17) CORRECTED BY EXCESS GROWTH RATE	$T.SEI(A) \times (1 + \Delta\kappa(A))$	$T.SEI(B) \times (1 + \Delta\kappa(B))$		
	165.19	15.68	...	...

$$PCPI(X) = T.SEI(X) \times (1 + \Delta\kappa(X))$$

PCPI(X) : PATENT COMPETITIVE POSITION INDEX (CORRECTED BY EXCESS GROWTH RATE)

T.SEI(X) : PATENT COMPETITIVE POSITION INDEX (BEFORE CORRECTION)

$\Delta\kappa(X)$: EXCESS GROWTH RATE OF THE ENTERPRISE (X)

FIG. 16

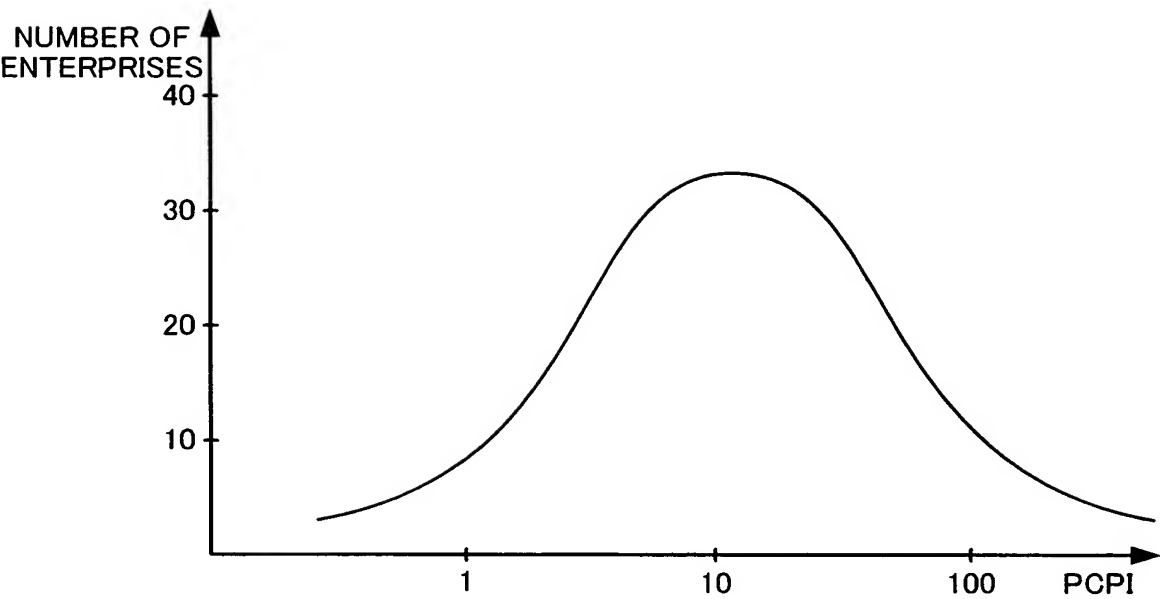


FIG. 17

STAR RANKING CATEGORIES	RANGE	RATIO
★★★★ SUPER STAR	$X + 2\sigma$ OR MORE	TOP 2.28%
★★★☆☆ STAR PLAYER	$X + \sigma$ OR MORE, LESS THAN $X + 2\sigma$	TOP 2.28% TO 16%
★★☆☆☆ PLAYER	X OR MORE, LESS THAN $X + \sigma$	TOP 16% TO 50%
★☆☆☆☆ BYPLAYER	$X - \sigma$ OR MORE, LESS THAN X	TOP 50% TO 84%
☆☆☆☆☆ EXTRA	LESS THAN $X - \sigma$	TOP 84% TO BOTTOM (BOTTOM 16%)

FIG. 18

STAR RANKING	TYPE CATEGORY NAME
★★★★	SUPER STAR
★★★☆☆	STAR PLAYER
★★☆☆☆	PLAYER
★☆☆☆☆	BYPLAYER
☆☆☆☆☆	EXTRA

FIG. 19

PATENT DIVERSIFICATION INDEX AND
PATENT COMPETITIVE POSITION INDEX,
STANDARDIZED PATENT COMPETITIVE POSITION INDEX
(EXAMPLE OF ENTERPRISE A)

[PDI] PATENT DIVERSIFICATION INDEX 63.5
CONCENTRATED TYPE

[PCPI] PATENT COMPETITIVE POSITION INDEX 165.20
★★★★★ STAR PLAYER

[avgPCPI] STANDARDIZED PATENT COMPETITIVE POSITION INDEX 33.04
★★★ SUPER STAR

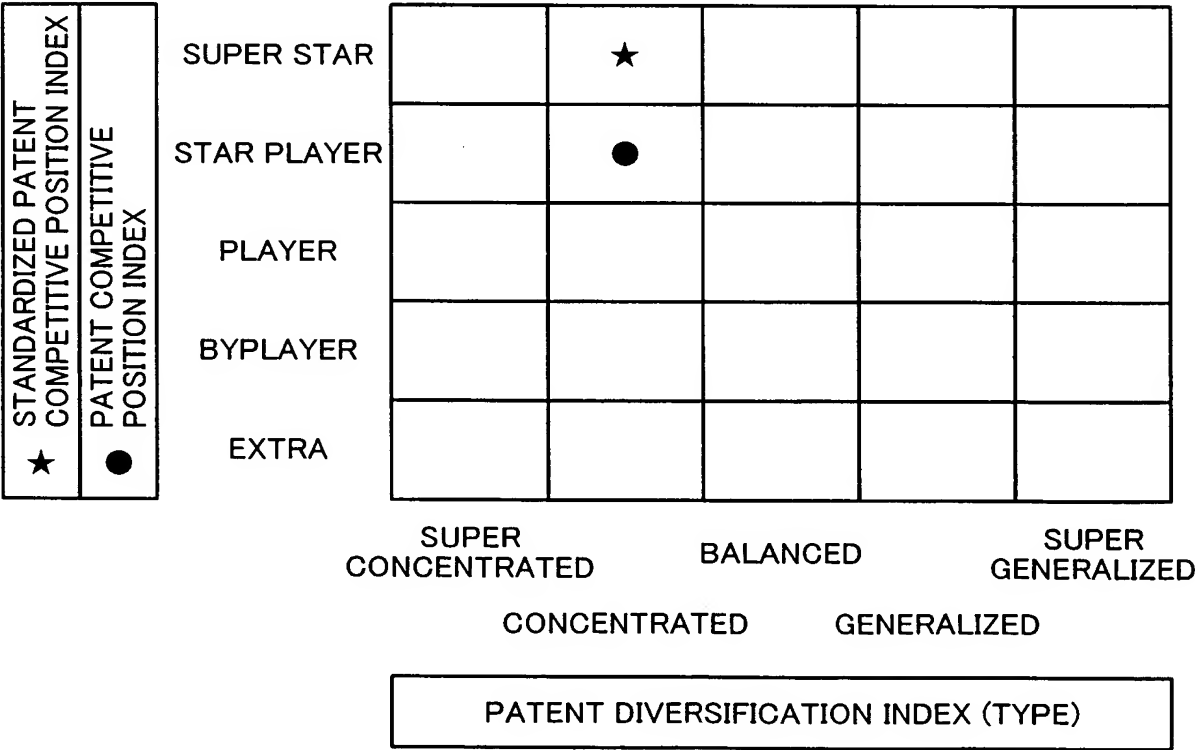


FIG. 20

PATENT DIVERSIFICATION INDEX AND
PATENT COMPETITIVE POSITION INDEX,
STANDARDIZED PATENT COMPETITIVE POSITION INDEX
(EXAMPLE OF ENTERPRISE B)

[PDI] PATENT DIVERSIFICATION INDEX 92.8
GENERALIZED TYPE

[PCPI] PATENT COMPETITIVE POSITION INDEX 15.68
★★★★★ PLAYER

[avgPCPI] STANDARDIZED PATENT COMPETITIVE POSITION INDEX 1.12
★★★ BYPLAYER

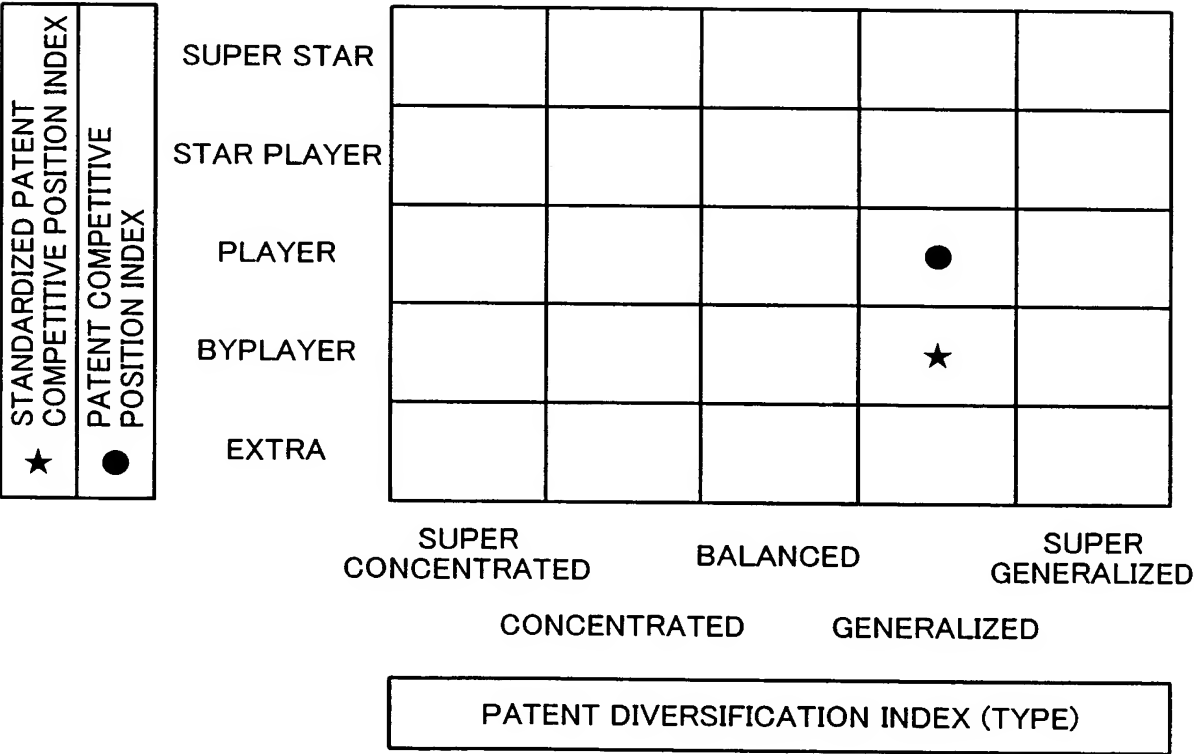


FIG. 21

**PATENT COMPETITIVE POSITION INDEX (PCPI)
RANKING (MACHINERY AND SHIPBUILDING)**

ORDER IN PATENT COMPETITIVE POSITION INDEX	ORDER IN STANDARD- IZED PATENT COMPETITIVE POSITION INDEX	NAME OF ENTERPRISE	PATENT COMPETITIVE POSITION INDEX	STANDARD- IZED PATENT COMPETITIVE POSITION INDEX	PATENT DIVERSIFI- CATION INDEX TYPE
1	9	MI	1477.62	5.24	SUPER GEN- ERALIZED
2	1	TS	365.06	45.63	CON- CENTRATED
3	45	IS	225.89	1.22	SUPER GEN- ERALIZED
4	42	KW	225.32	1.37	SUPER GEN- ERALIZED
5	6	TK	216.99	7.00	GEN- ERALIZED
6	16	HK	206.44	2.99	BALANCED
7	3	TL	204.26	11.35	BALANCED
8	15	MU	197.84	3.09	BALANCED
9	12	MA	175.60	4.88	GEN- ERALIZED
10	5	JU	175.33	8.77	CON- CENTRATED
11	21	MZ	159.65	2.62	GEN- ERALIZED
12	36	HZ	140.98	1.60	SUPER GEN- ERALIZED
13	35	DK	139.15	1.66	BALANCED
14	17	BR	135.51	2.95	BALANCED
15	11	OR	133.88	4.96	BALANCED
16	51	SJ	130.64	1.08	SUPER GEN- ERALIZED
17	24	BH	127.89	2.17	GEN- ERALIZED
18	61	KB	126.96	0.84	SUPER GEN- ERALIZED
19	13	MK	106.40	4.63	GEN- ERALIZED
20	34	NS	84.51	1.66	BALANCED

FIG. 22

STANDARDIZED PATENT COMPETITIVE POSITION INDEX (avgPCPI)
RANKING (MACHINERY AND SHIPBUILDING)

ORDER IN STANDARD- IZED PATENT COMPETITIVE POSITION INDEX	ORDER IN PATENT COMPETITIVE POSITION INDEX	NAME OF ENTERPRISE	STANDARD- IZED PATENT COMPETITIVE POSITION INDEX	PATENT COMPETITIVE POSITION INDEX	PATENT DIVERSIFI- CATION INDEX TYPE
1	2	TS	45.63	365.06	CON- CENTRATED
2	22	RE	27.54	82.63	SUPER CON- CENTRATED
3	7	TL	11.35	204.26	BALANCED
4	65	SA	9.63	9.63	SUPER CON- CENTRATED
5	10	JU	8.77	175.33	CON- CENTRATED
6	5	TK	7.00	216.99	GEN- ERALIZED
7	34	TY	5.95	35.69	CON- CENTRATED
8	25	SE	5.65	67.80	BALANCED
9	1	MI	5.24	1477.62	SUPER GEN- ERALIZED
10	23	HH	5.14	71.93	BALANCED
11	15	OR	4.96	133.88	BALANCED
12	9	MA	4.88	175.60	GEN- ERALIZED
13	19	MK	4.63	106.40	GEN- ERALIZED
14	96	KK	3.45	3.45	SUPER CON- CENTRATED
15	8	MU	3.09	197.84	BALANCED
16	6	HK	2.99	206.44	BALANCED
17	14	BR	2.95	135.51	BALANCED
18	51	IS	2.91	14.54	CON- CENTRATED
19	53	TJ	2.87	14.35	CON- CENTRATED
20	27	RK	2.82	59.19	BALANCED

FIG. 23

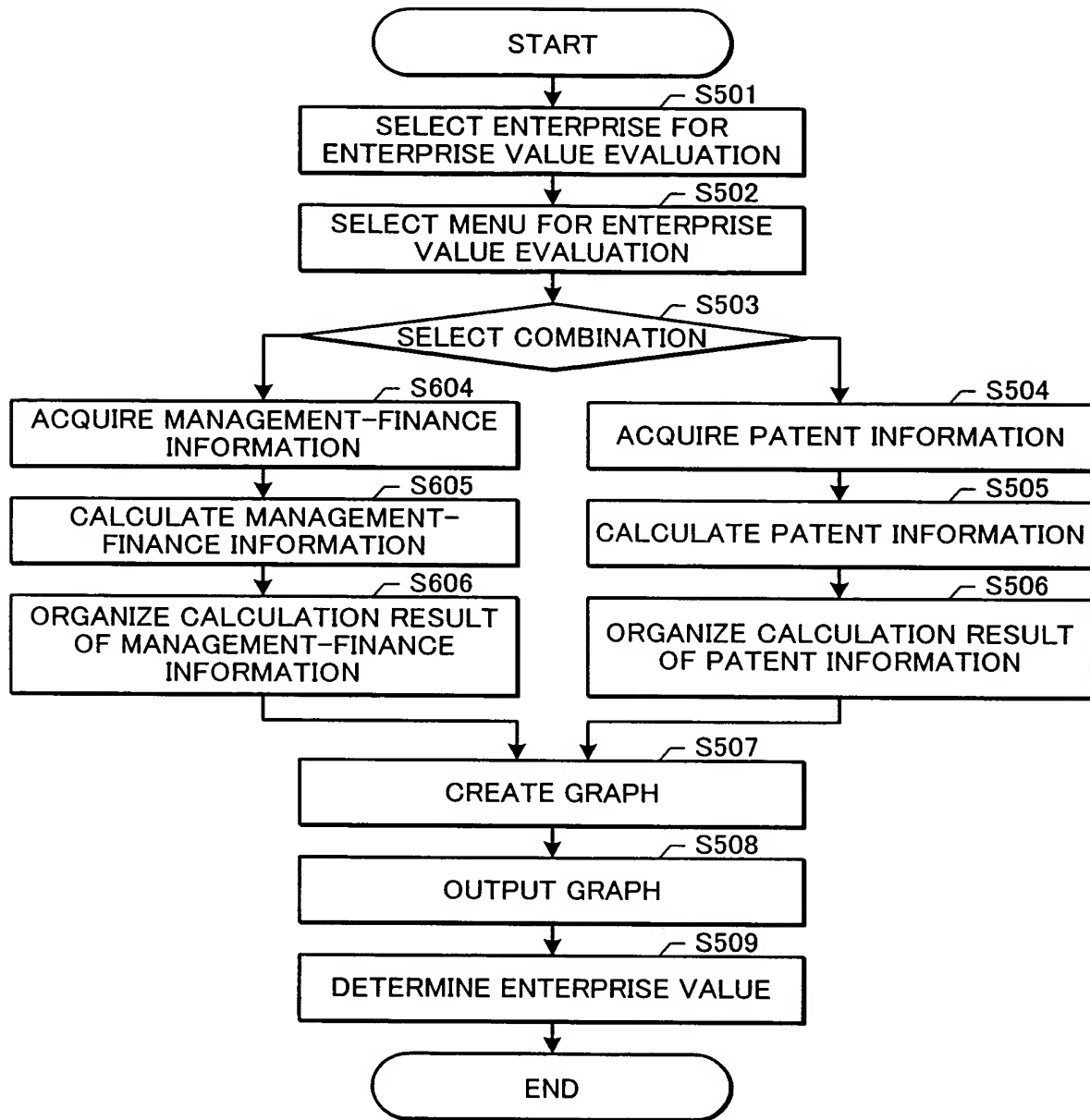


FIG. 24

ENTERPRISE VALUE EVALUATION MENU (5)			
SELECT INDEXES IN THE WINDOWS BELOW			
BUSINESS, PROFIT AND MARKET VALUE	R&D AND PATENT	PATENT PORTFOLIO	
(A) Investment index <input type="checkbox"/>	(R) Research and development related index <input type="checkbox"/>	(PAP) Patent application portfolio analysis <input type="checkbox"/>	Patent application portfolio analysis <input type="checkbox"/>
(B) Management-finance analysis index <input type="checkbox"/>	(PA) Patent application related index <input type="checkbox"/>	(PKA) Characteristic keyword list <input checked="" type="checkbox"/>	(PD) Patent diversification index <input checked="" type="checkbox"/>
(C) Profit related index <input type="checkbox"/>	(PB) Examination request related index <input type="checkbox"/>	(PSI) Patent similarity analysis <input type="checkbox"/>	(PCPI) Patent competitive position index <input type="checkbox"/>
(D) Excess profit analysis index <input type="checkbox"/>	(PT) Patent acquisition (registration) related index <input type="checkbox"/>		(avgPCPI) Standardized patent competitive position index <input type="checkbox"/>
(M) Market evaluation related index <input type="checkbox"/>	(PP) Patent productivity index <input type="checkbox"/>		
(PE) Patent profitability index <input type="checkbox"/>	(PS) Patent stock related index <input type="checkbox"/>		

FIG. 25

ENTERPRISE VALUE EVALUATION MENU (4)

SELECT INDEXES IN THE WINDOWS BELOW

**BUSINESS, PROFIT AND
MARKET VALUE**

<input type="checkbox"/> (A) Investment index
<input type="checkbox"/> (B) Management—finance analysis index
<input type="checkbox"/> (C) Profit related index
<input type="checkbox"/> (D) Excess profit analysis index
<input type="checkbox"/> (M) Market evaluation related index
<input type="checkbox"/> (PE) Patent profitability index

R&D AND PATENT

<input type="checkbox"/> (R) Research and development related index
<input type="checkbox"/> (PA) Patent application related index
<input type="checkbox"/> (PB) Examination request related index
<input type="checkbox"/> (PT) Patent acquisition (registration) related index
<input type="checkbox"/> (PP) Patent productivity index
<input type="checkbox"/> (PS) Patent stock related index

PATENT PORTFOLIO

<input type="checkbox"/> (PAP) Patent application portfolio analysis
<input type="checkbox"/> (PKA) Characteristic keyword list
<input checked="" type="checkbox"/> (PSI) Patent similarity analysis
<input type="checkbox"/> Patent application portfolio analysis
<input type="checkbox"/> (PDI) Patent diversification index
<input checked="" type="checkbox"/> (PCPI) Patent competitive position index
<input type="checkbox"/> (avgPCPI) Standardized patent competitive position index

BACK
SET

FIG. 26

ENTERPRISE VALUE EVALUATION MENU (3)

BACK

SET

SELECT INDEXES IN THE WINDOWS BELOW

BUSINESS, PROFIT AND
MARKET VALUE

☐

(A) Investment index

☐

(B) Management-finance
analysis index

☐

(C) Profit related index

☐

(D) Excess profit analysis
index

☐

(M) Market evaluation
related index

☐

(PE) Patent profitability
index

☐

(R) Research and
development related index

☐

(PA) Patent application
related index

☐

(PB) Examination request
related index

☐

(PT) Patent acquisition
(registration) related index

☐

(PP) Patent productivity
index

☐

(PS) Patent stock related
index

☐

(PAP) Patent application
portfolio analysis

☐

Number of patent
applications

☒

Number of claims filed

☐

Number of claims per
application

☐

Number of applications
per inventor

☐

Number of claims filed
per inventor

☐

Number of joint
applications

☐

Ratio of joint
applications

☐

Joint applicants

☐

Total number of
applications

PATENT PORTFOLIO

FIG. 27

ENTERPRISE VALUE EVALUATION MENU (1)		
SELECT INDEXES IN THE WINDOWS BELOW		
BUSINESS, PROFIT AND MARKET VALUE	R&D AND PATENT	PATENT PORTFOLIO
(A) Investment index <input type="checkbox"/>	(R) Research and development related index <input type="checkbox"/>	(PAP) Patent application portfolio analysis <input type="checkbox"/>
(B) Management-finance analysis index <input type="checkbox"/>	(PA) Patent application related index <input type="checkbox"/>	(PKA) Characteristic keyword list <input type="checkbox"/>
(C) Profit related index <input checked="" type="checkbox"/>	(PB) Examination request related index <input type="checkbox"/>	(PS) Patent similarity analysis <input type="checkbox"/>
(D) Excess profit analysis index <input type="checkbox"/>	(PT) Patent acquisition (registration) related index <input type="checkbox"/>	
(M) Market evaluation related index <input type="checkbox"/>	(PP) Patent productivity index <input type="checkbox"/>	
(PE) Patent profitability index <input type="checkbox"/>	(PS) Patent stock related index <input type="checkbox"/>	

FIG. 28

ENTERPRISE VALUE EVALUATION MENU (2)

BACK

SET

SELECT INDEXES IN THE WINDOWS BELOW

BUSINESS, PROFIT AND MARKET VALUE

R&D AND PATENT

PATENT PORTFOLIO

<div><div>(A) Investment index</div><div><input type="checkbox"/></div></div>	<div><div>(R) Research and development related index</div><div><input type="checkbox"/></div></div>	<div><div>(PAP) Patent application portfolio analysis</div><div><input type="checkbox"/></div></div>
<div><div>(B) Management—finance analysis index</div><div><input type="checkbox"/></div></div>	<div><div>(PA) Patent application related index</div><div><input checked="" type="checkbox"/></div></div>	<div><div>(PKA) Characteristic keyword list</div><div><input type="checkbox"/></div></div>
<div><div>(C) Profit related index</div><div><input type="checkbox"/></div></div>	<div><div>Sales volume</div><div><input type="checkbox"/></div></div>	<div><div>(PSI) Patent similarity analysis</div><div><input type="checkbox"/></div></div>
<div><div>(D) Excess profit analysis index</div><div><input type="checkbox"/></div></div>	<div><div>Value added amount</div><div><input type="checkbox"/></div></div>	
<div><div>(M) Market evaluation related index</div><div><input checked="" type="checkbox"/></div></div>	<div><div>GBP</div><div><input type="checkbox"/></div></div>	
<div><div>(PE) Patent profitability index</div><div><input type="checkbox"/></div></div>	<div><div>EBITDA</div><div><input type="checkbox"/></div></div>	
	<div><div>Operating profit</div><div><input type="checkbox"/></div></div>	
	<div><div>Net operating profit</div><div><input type="checkbox"/></div></div>	
	<div><div>Patent royalty income</div><div><input type="checkbox"/></div></div>	
	<div><div>ROA. α</div><div><input type="checkbox"/></div></div>	
	<div><div>ROA. β</div><div><input type="checkbox"/></div></div>	
	<div><div>ROA. γ</div><div><input type="checkbox"/></div></div>	
	<div><div>ROA. δ</div><div><input type="checkbox"/></div></div>	
	<div><div>EOIA</div><div><input type="checkbox"/></div></div>	
	<div><div>ROIA</div><div><input type="checkbox"/></div></div>	

FIG. 29

ENTERPRISE VALUE EVALUATION
INPUT CONDITION SETTING (1)

SELECT CONDITIONS IN THE WINDOWS BELLOW

TARGET DOCUMENT

Unexamined patents	<input checked="" type="checkbox"/>
Registered patents	<input checked="" type="checkbox"/>
Utility models	<input type="checkbox"/>
Academic documents	<input type="checkbox"/>

DATA READ

Internal DB1	<input checked="" type="checkbox"/>
Internal DB2	<input type="checkbox"/>
JPO IPDL	<input type="checkbox"/>
PATOLIS	<input type="checkbox"/>
Other commercially available DB1	<input type="checkbox"/>
Other commercially available DB2	<input type="checkbox"/>
FD	<input type="checkbox"/>
CD	<input type="checkbox"/>
MO	<input type="checkbox"/>
DVD	<input type="checkbox"/>
Others	<input type="checkbox"/>

BACK

SET

FIG. 30

ENTERPRISE VALUE EVALUATION
INPUT CONDITION SETTING (2)

SELECT CONDITIONS IN THE WINDOWS BELLOW

TARGET

All industries		
Industry	Food	<input type="checkbox"/>
Enterprise	Ceramic	<input type="checkbox"/>
Other unit	Steel, nonferrous and metal	<input type="checkbox"/>
	Machinery and shipbuilding	<input type="checkbox"/>
	Electrical equipment	<input checked="" type="checkbox"/>
	Automobile & transport machine	<input type="checkbox"/>
	Fabric, pulp and paper	<input type="checkbox"/>
	Precision equipment	<input type="checkbox"/>
	Other manufacturing	<input type="checkbox"/>
	Construction	<input type="checkbox"/>
	Information & telecommunication	<input type="checkbox"/>
	Electricity and gas	<input type="checkbox"/>
	Chemical	<input type="checkbox"/>
	Service	<input type="checkbox"/>
	Pharmaceutical	<input type="checkbox"/>

TARGET

Industry	<input type="checkbox"/>
Enterprise	<input type="checkbox"/>
Enterprise	
Other unit	

BACK

SET

Company name

Company code

Applicant code

Search

FIG. 31

ENTERPRISE VALUE EVALUATION OUTPUT CONDITION SETTING

SELECT CONDITIONS IN THE WINDOWS BELLOW

BACK
SET

MAP POSITION

1 map	<input checked="" type="checkbox"/>
2 maps	<input type="checkbox"/>
1 data sheet	<input type="checkbox"/>
2 data sheets	<input type="checkbox"/>
1 map with data	<input type="checkbox"/>
2 maps with data	<input type="checkbox"/>
1 map with comment	<input type="checkbox"/>
2 maps with comment	<input type="checkbox"/>
1 map with data and comment	<input type="checkbox"/>
2 maps with data and comment	<input type="checkbox"/>

OUTPUT DATA

PDI	none	<input type="checkbox"/>
PCPI	top 5	<input type="checkbox"/>
avgPCPI	top 10	<input type="checkbox"/>
COMMENT	top 15	<input type="checkbox"/>
(free entry)	top 20	<input checked="" type="checkbox"/>
	numerical input	<input type="checkbox"/>

FIG. 32

"PATENT QUARTERLY JOURNAL" INDEX LIST OF ENTERPRISE VALUE EVALUATION SYSTEM

A: Business, Profit and Market Value Related Index (1)

Index Group	Index	Formula
(A) Investment	Facility Investment Amount	$\{(\text{Current Term Tangible Fixed Assets} - \text{Previous Term Tangible Fixed Assets}) + (\text{Current Term Depreciation Cost})\}$
	R&D Cost	$\text{Total Amount of R\&D Cost}$
	Investment Trend Index	$\text{Term-on-Term Ratio of } \{(\text{Facility Investment Amount}) + (\text{R\&D Cost})\}$
	Facility Investment Efficiency	$(\text{Value Added Amount})/(\text{Tangible Fixed Assets})$
	Labor Productivity	$(\text{Value Added Amount})/(\text{Number of Employees})$
(B) Management/Finance Analysis	Labor Equipment Ratio	$(\text{Tangible Fixed Assets})/(\text{Number of Employees})$
	Labor Distribution Share	$\{(\text{Personnel Expense to be Included in Selling Cost and Administrative Expenses}) + (\text{Labor Cost to be Included in Manufacturing Cost})/(\text{Value Added Amount})\} \times (\text{Value Added Amount Rate of Change}) - \{(\text{Labor Distribution Share (To Value Added)}) \times (\text{Value Added Amount Rate of Change}) - \{(\text{Labor Distribution Share (To Value Added)}) \times (\text{Value Added Amount Rate of Change})\} - \{(\text{Labor Distribution Share (To Value Added)}) \times (\text{Value Added Amount Rate of Change})\}\}$
	Total Factor Productivity	$(\text{Depreciation Target Tangible Fixed Assets Rate of Change}) - \{(\text{Labor Distribution Share (To Value Added)}) \times (\text{Value Added Amount Rate of Change})\}$
	Cost-to-Sales Ratio	$(\text{To Value Added}) \times (\text{Number of Employees Rate of Change})$
	Cost of Sales-and-Administration Ratio to Sales	$(\text{Cost of Sales})/(\text{Sales Volume})$
	Interest Bearing Debt Ratio	$(\text{Selling Cost and Administrative Expenses})/(\text{Sales Volume})$
	Equity to Asset Ratio	$(\text{Interest Bearing Debt})/(\text{Total Assets})$
	Sales Volume	$(\text{Equity Capital})/(\text{Total Assets})$
	Value Added Amount	(Sales Volume)
	Gross Operating Profit (GBP)	$(\text{Operating Net Profit}) + (\text{Interest Paid and Discount}) + (\text{R\&D Cost}) + (\text{Depreciation Cost}) + (\text{Personnel Expense (including board members' remuneration)}) + (\text{Welfare Expense}) + (\text{Tax and Dues}) - (\text{Operating Net Profit}) - (\text{Interest Paid and Discount})$
(C) Profit Related Items	Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA)	$(\text{Operating Profit}) + (\text{R\&D Cost})$
	Operating Profit	$(\text{Operating Profit}) + (\text{Depreciation Cost})$
	Operating Net Profit	$(\text{Operating Profit})$
	Patent Royalty Income	$(\text{Operating Profit}) - (\text{Interest Paid and Discount})$
	ROA α	$(\text{Patent Royalty Income (including Royalty Income of Trademarks and Brands, etc.)})/(\text{Value Added Amount}) + (\text{Patent Royalty Income})/(\text{Total Assets})$
	ROA β	$(\text{GBP}) + (\text{Patent Royalty Income})/(\text{Total Assets})$
	ROA γ	$(\text{EBITDA}) + (\text{Patent Royalty Income})/(\text{Total Assets})$
	ROA δ	$(\text{Operating Profit}) + (\text{Patent Royalty Income})/(\text{Total Assets})$
	Earnings on Intellectual Assets (EOIA)	$(\text{GBP}) + (\text{Patent Royalty Income}) - \{(\text{Financial Assets}) \times (\text{Profit Ratio m})\} + \{(\text{Tangible Fixed Assets}) \times (\text{Profit Ratio f})\}$ (Profit Ratio m: Application of Short Term Prime Rate; (Profit Ratio f): Application of Long Term Prime Rate)
	Return On Intellectual Assets (ROIA)	$(\text{Earnings on Intellectual Assets})/(\text{Total Assets})$

FIG. 33

"PATENT QUARTERLY JOURNAL" INDEX LIST OF ENTERPRISE VALUE EVALUATION SYSTEM

A: Business, Profit and Market Value Related Index (2)

Index Group	Index	Formula
(D) Excess Profit Analysis	Excess Value Added Amount	$\text{Sales Volume} \times \{(\text{Sales Volume Value Added Ratio}) - (\text{Industry Average Sales Volume Value Added Ratio})\}$
	Excess GBP	$\text{Sales Volume} \times \{(\text{Sales Volume GBP Ratio}) - (\text{Industry Average Sales Volume GBP Ratio})\}$
	Excess EBITDA	$\text{Sales Volume} \times \{(\text{Sales Volume EBITDA Ratio}) - (\text{Industry Average Sales Volume EBITDA Ratio})\}$
	Excess Operating Profit	$\text{Sales Volume} \times \{(\text{Operating Profit Ratio (To Sales)}) - (\text{Industry Average Operating Profit Ratio (To Sales)})\}$
	Excess ROA α	$(\text{ROA } \alpha) - (\text{Industry Average ROA } \alpha)$
	Excess ROA β	$(\text{ROA } \beta) - (\text{Industry Average ROA } \beta)$
	Excess ROA γ	$(\text{ROA } \gamma) - (\text{Industry Average ROA } \gamma)$
	Excess ROA δ	$(\text{ROA } \delta) - (\text{Industry Average ROA } \delta)$
	Excess Earnings on Intellectual Assets (EXEOIA)	$(\text{Net Assets}) \times \{(\text{Ratio of Earnings on Intellectual Assets}) - (\text{Industry Average of Ratio of Earnings on Intellectual Assets})\}$
	MVA	$(\text{Value of Stock}) - (\text{Shareholders' Equity}) \quad (\text{Value of Stock}) = (\text{Total Number of Outstanding Stock}) \times (\text{Stock Price})$
(M) Market Evaluation Related Items	PBR	$(\text{Value of Stock})/(\text{Equity Capital})$
	Expected Intellectual Property Profit	$\{(\text{Fixed Liabilities}) \times (\text{Profit Ratio a}) + (\text{Value of Stock}) \times (\text{Profit Ratio p})\} - \{(\text{Financial Assets}) \times (\text{Profit Ratio m}) + (\text{Tangible Fixed Assets}) \times (\text{Profit Ratio f})\} \quad (\text{Profit Ratio a}): (\text{Weighted Average of Long Term Prime Rate and Bond Rate}) \times (1 - \text{Corporate Tax}) \quad (\text{Profit Ratio p}): (\text{Calculated Based on Capital Asset Pricing Model (CAPM). Yield on Long Term 10-Year Government Bonds, Stock Investment Profit Ratio, } \beta \text{ Value were used; } (\text{Profit Ratio m}): \text{Application of Short Term Prime Rate } (\text{Profit Ratio f}): \text{Application of Long Term Prime Rate}$
		Rate
		$\{(\text{GBP}) + (\text{Patent Royalty Income})\}/(\text{Total Number of Effective Patents})$
(PE) Patent Profitability Related Items	Patent Profitability α	$\{(\text{GBP}) + (\text{Patent Royalty Income})\}/(\text{Total Number of Effective Patents})$
	Patent Profitability β	$\{(\text{Excess Value Added}) + (\text{Patent Royalty Income})\}/(\text{Total Number of Effective Patents})$
	Patent Profitability γ	$\{(\text{Excess GBP}) + (\text{Patent Royalty Income})\}/(\text{Total Number of Effective Patents})$
	Patent Profitability δ	$(\text{Excess Earnings on Intellectual Assets (EXEOIA)})/(\text{Total Number of Effective Patents})$

FIG. 34

"PATENT QUARTERLY JOURNAL" INDEX LIST OF ENTERPRISE VALUE EVALUATION SYSTEM

B: R&D and Patent Related Index (1)

Index Group	Index	Formula
(R) R&D Related Items	R&D Cost Ratio α	$(R\&D\ Cost)/(Sales\ Volume)$
	R&D Cost Ratio β	$(R\&D\ Cost)/(Value\ Added\ Amount)$
	R&D Cost Ratio γ	$(R\&D\ Cost)/(GBP)$
	R&D Cost Ratio δ	$(R\&D\ Cost)/(Total\ Assets)$
	Number of Inventors	(Calculated Based on "Inventor" Column of Laid-Open Publications)
	Ratio of Inventors	$(Number\ of\ Inventors)/(Number\ of\ Employees)$
(PA) Patent Application Related Items	R&D Cost per Inventor	$(R\&D\ Cost)/(Number\ of\ Inventors)$
	Number of Patent Applications	(Joint Application is Recorded as One Application)
	Number of Claims Filed	(Sum of Number of Claims of Laid-Open Publications)
	Number of Claims per Patent Application	$(Number\ of\ Claims\ Filed)/(Number\ of\ Patent\ Applications)$
	Number of application per Inventor	$(Number\ of\ Patent\ Applications\ (Other\ Than\ Joint\ Applications))/(Number\ of\ Inventors)$
	Number of Claims per Inventor (Patent Application)	$(Number\ of\ Claims\ Filed\ (Other\ Than\ Joint\ Applications))/(Number\ of\ Inventors)$
(PB) Examination Request Related Items	Number of Joint Applications	(Number of Joint Applications Among Patent Applications Filed)
	Joint Filing Ratio	$(Number\ of\ Joint\ Applications)/(Number\ of\ Patent\ Applications)$
	Number of Applicants in Joint	(Number of Joint Applicants in Joint Applications)
	Patent Application Stock	(Cumulative Number of Patent Applications)
	Number of Examination Requests Years to Examination Request (Average)	$(Number\ of\ Examination\ Requests\ Filed) / \{ \sum (Date\ of\ Examination\ Request - Filing\ Date) \} / (Number\ of\ Examination\ Requests) \times (Annual\ Number\ of\ Days)$
	Examination Request Ratio	$(Examination\ Request\ Ratio\ Pertaining\ to\ Number\ of\ Patent\ Applications\ of\ Each\ Year)$
	Cumulative Number of Examination Requests	(Cumulative Number of Examination Requests)

FIG. 35

"PATENT QUARTERLY JOURNAL" INDEX LIST OF ENTERPRISE VALUE EVALUATION SYSTEM

B: R&D and Patent Related Index (2)

Index Group	Index	Formula
(PT) Patent Acquisition (Registration) Related Items	Number of Patents Granted	(Number of Patents Granted)
	Number of Claims Registered	(Number of "Claims" in Registered Gazette)
	Years to Patent Granted (Average)	$\{ \sum (\text{Patent Registration Date} - \text{Patent Filing Date}) / (\text{Number of Patents Granted}) \times (\text{Annual Number of Days}) \}$
	Patent Granted Ratio to Number of Applications	(Number of Patents Granted Each Year) / (Number of Patent Applications Filed Each Year)
	Patent Granted Stock	(Patent Granted Stock at End of Each Year)
	Patent Granted Ratio to Number of Examination Requests	(Number of Patents Granted Each Year) / (Number of Examination Requests Filed Each Year)
	Patent Granted Stock Ratio to Examination Request Stock	(Patent Granted Stock) / (Cumulative Number of Examination Requests)
	Examination Request Stock	(Number of Patents Granted Each Year) - (Number of Patents Invalidated Among Patent Registrations Each Year)
	Number of Effective Patents Granted	(Number of Claims of Patent Applications in a year) / (R&D Cost in a previous year)
	Patent Application Productivity	Correction of (Patent Application Productivity). (Patent Application Productivity) \times (Estimated Examination Request Ratio) (Estimated Examination Request Ratio: Sought Based on Number of Examination Requests for Previous Applications in which the term for Examination Request is expired.)
(PP) Patent Productivity	Examination Request Productivity	Correction of (Patent Application Productivity). (Patent Application Productivity) \times (Estimated Examination Request Ratio) (Estimated Registration Ratio: Sought Based on Number of Registrations of Previous Applications, Lapsed Years, Average Required Years to Patent Granted)
	Patent Granted Productivity	(Patent Granted Stock) - (Patent Invalidation Stock)
	Total Number of Effective Patents	(Total Number of Effective Patents) / (Patent Granted Stock)
(PS) Patent Stock Related Items	Patent Granted Renewal Ratio	$\{ \sum (\text{Scheduled Invalidation Date of Each Patent of the Total Number of Effective Patents} - \text{Year End}) \}$
	Years to Renewal Patent Granted Expiration (Average)	$\{ \sum (\text{Total Number of Effective Patents}) \times (\text{Annual Number of Days}) \}$
	Patent Stock Index	(Total Number of Effective Patents) \times (Years to Renewal Patent Granted Expiration (Average))
	Total Patent Assets	$\{ (\text{R\&D Cost}) / (\text{Number of Patents Granted}) \} \times (\text{Total Number of Effective Patents})$

FIG. 36

"PATENT QUARTERLY JOURNAL" INDEX LIST OF ENTERPRISE VALUE EVALUATION SYSTEM

C: Patent Portfolio Related Index

Index Group	Index	Formula
(PAP) Patent Application Portfolio analysis	Patent Application Portfolio analysis	(Power of Number of Claims Share Per Technical Field) (Share: Share of Each Technical Field in an Enterprise or Share of each Enterprise in All Enterprises in a Technical Field)
	Patent Diversification Index (PDI)	$[1 - \sum (\text{Share of Each Technical Field in an Enterprise})^2]$
	Patent Competitive Position Index (PCPI)	$\sum [\sum (\text{SEI Index Per Technical Field}) \times (\text{Share of Each Company Per Technical Field})] \times (1 + \text{Excess Growth Rate})$
	Average Patent Competitive Position Index (Average PCPI)	(Patent Competitive Position Index (PCPI)) / (Number of Technical Fields covered by Company's Patent Applications (Average in 3 Years))
(PKA) Characteristic Keywords	Characteristic Keywords	(Selected Keywords Having an Appearance Frequency That is Not Large in All Patent Publications and That is Large in Patent Publications of the Same Company)
	Number of Characteristic Keywords	(Representation of Character of an Enterprise by the Number of Keywords under a Constant Condition of Selecting the Characteristic Keywords)
(PSI) Patent Similarity Analysis	Patent Similarity Index	(Ratio of Patent Publications Having the Keyword of the Subject Patent Publication within a Population)
	Patent Similarity Index to the Same Company (PSIself)	(Patent Similarity Index (PSI) When the Population is the Same Company's Patent Publications)
	Patent Similarity Index to All Companies (PSIall)	(Patent Similarity Index (PSI) When the Population is All Patent Publications Including the Other Companies' Patent Publications)
	Normal Patent Publication	(Patent Publications Having Significantly Large PSIall)
	Exceptional Patent Publication	(Patent Publications Having Significantly Small PSIall)

FIG. 37

RELATIONSHIP BETWEEN PATENT COMPETITIVE POSITION INDEX (PCPI) AND GROSS OPERATING PROFIT (GBP)	
GROSS OPERATING PROFIT	PROFITABILITY: HIGH PATENT COMPETITIVE POSITION: LOW
	PROFITABILITY: HIGH PATENT COMPETITIVE POSITION: HIGH
	PROFITABILITY: LOW PATENT COMPETITIVE POSITION: LOW
	PROFITABILITY: LOW PATENT COMPETITIVE POSITION: HIGH
PATENT COMPETITIVE POSITION INDEX (PCPI)	

FIG. 38

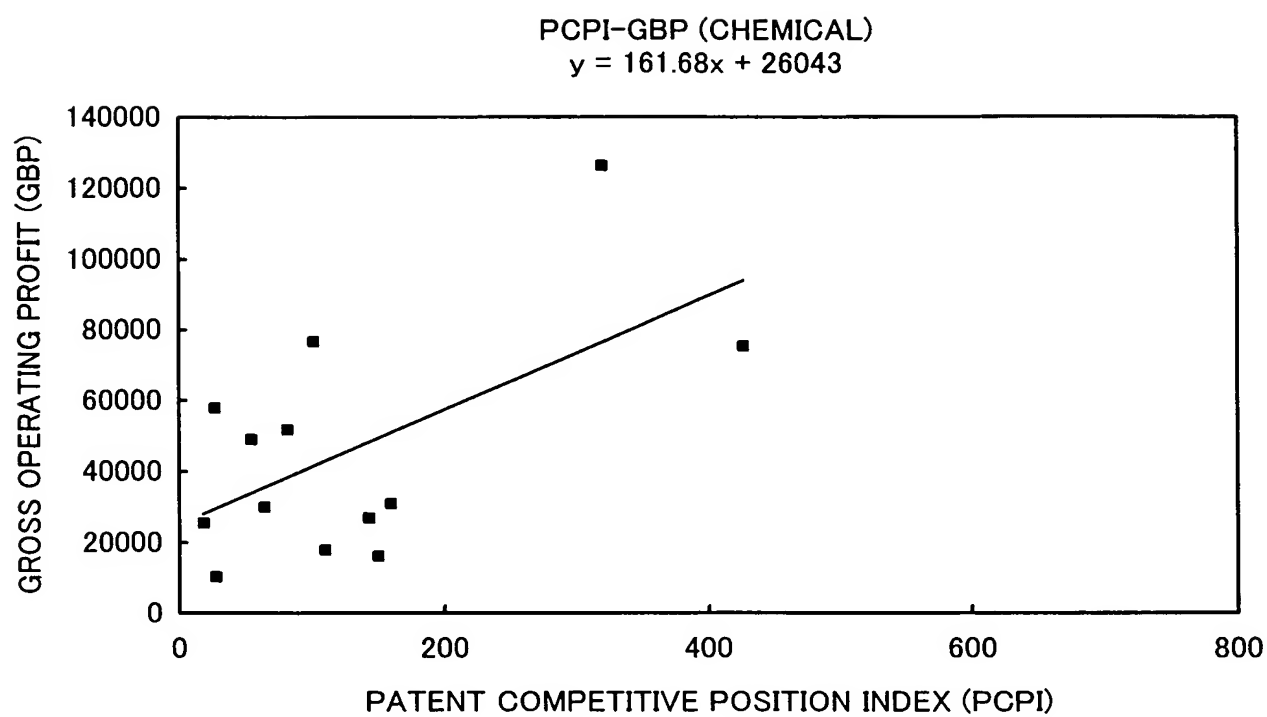


FIG. 39

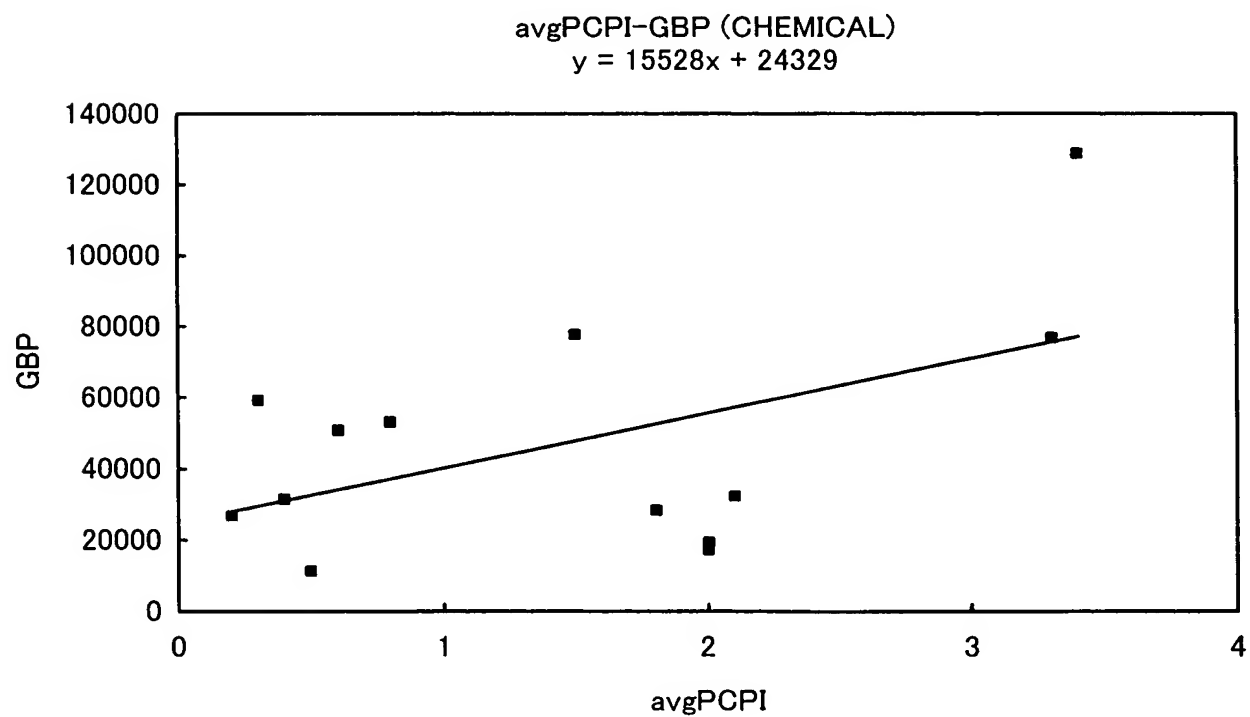


FIG. 40

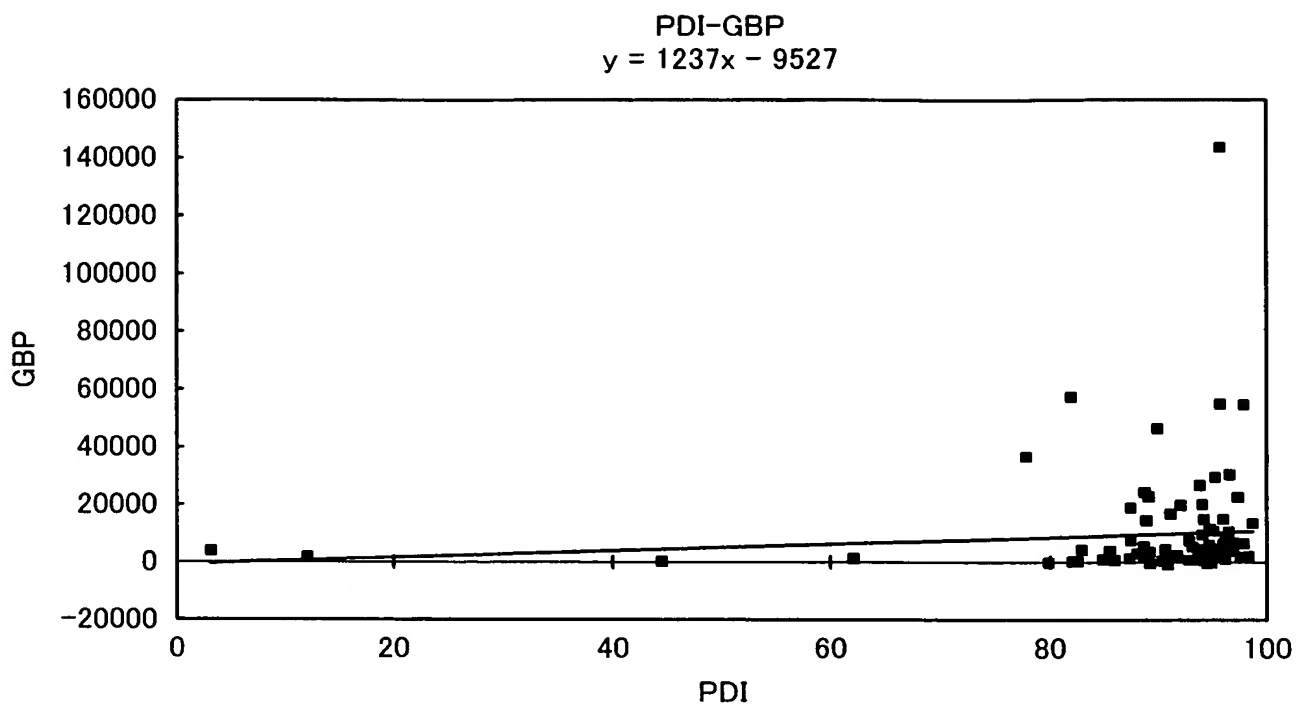


FIG. 41

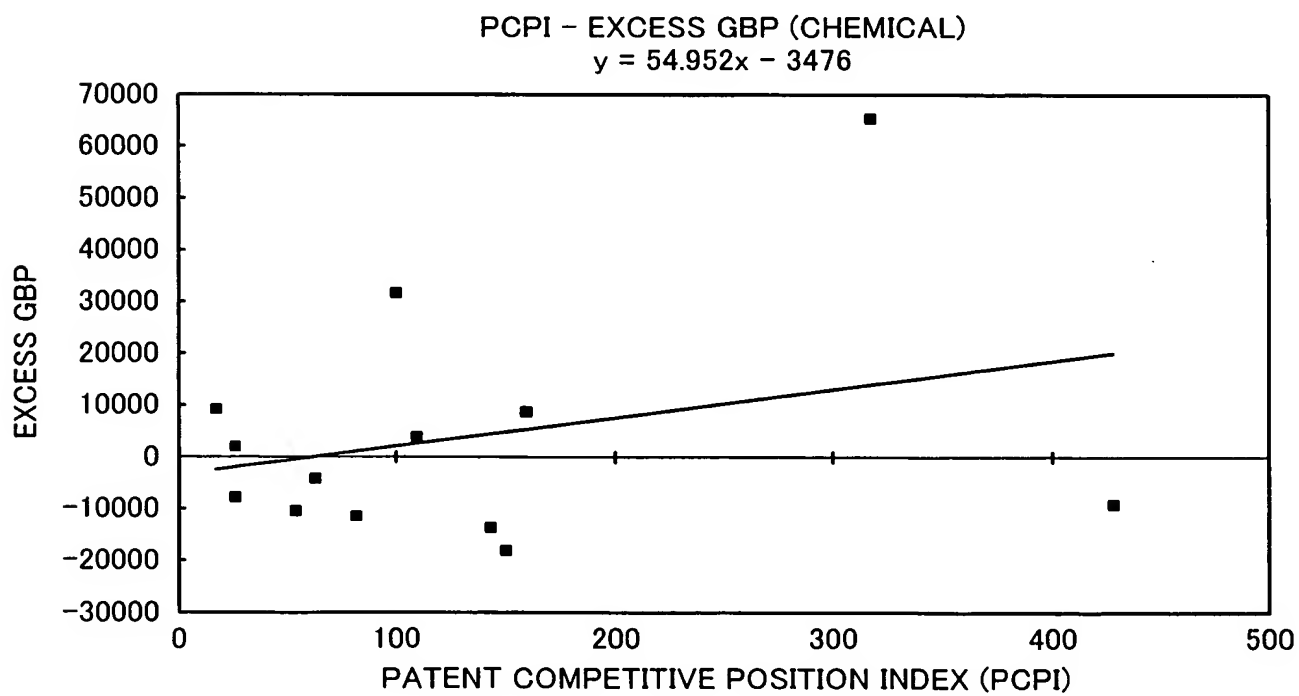


FIG. 42

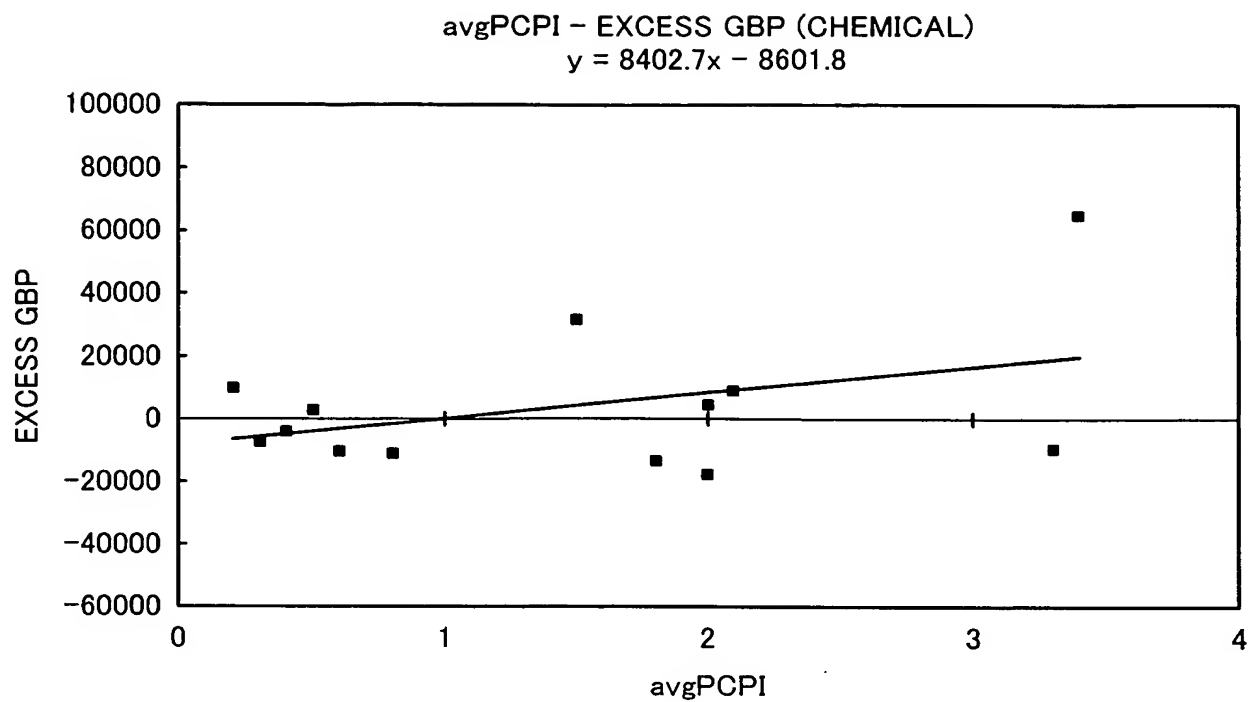


FIG. 43

